

SINGLE CRYSTAL Ni HEAT RESISTANT ALLOY AND TURBINE BRADE

Patent number: JP2001294959
Publication date: 2001-10-26
Inventor: OKADA IKUO; TAKAHASHI KOJI; IZUTSU DAISUKE;
KAWAI HISATAKA
Applicant: MITSUBISHI HEAVY IND LTD
Classification:
- **International:** C22C19/05; F01D5/28; C22C19/05; F01D5/28; (IPC1-
7); C22C19/05; F01D5/28
- **european:**
Application number: JP20000115164 20000417
Priority number(s): JP20000115164 20000417

[Report a data error here](#)

Abstract of JP2001294959

PROBLEM TO BE SOLVED: To provide a single crystal heat resistant Ni alloy excellent in castability and also excellent in a high temperature strength, and to provide a turbine brade made of the same.
SOLUTION: This alloy has a composition containing, by weight, 7.5 to 10% Cr, 4.5 to 6% Co, 0.5 to 3% Mo, 7 to 9% W, 4.5 to 6.5% Al and 5.5 to 7.0% Ta, and further containing either or both of 0.005 to 0.07% C and 0.001 to 0.006% B. If required, the alloy contains one or more kinds metals selected from 0.01 to 0.2% Hf, 0.01 to 2% Re, 0.01 to 0.03% Pt, 1 to 100 ppm Ca, 1 to 100 ppm Mg and 0.5 to 2% Ti as well.

Data supplied from the **esp@cenet** database - Worldwide